

Mr. Marlatt mentioned the great abundance of this and other species of the genus in the treeless districts of western Kansas, and stated that they were to be found in immense numbers about the chalk cliffs on the cretaceous belt of the States, particularly on and flying over the hard-packed ground in the vicinity of the cliffs. The absence of trees would prevent their living on the larva mentioned by Mr. Pergande.

Mr. Banks presented the following paper

ON *PRODIDOMUS RUFUS* HENTZ.

By NATHAN BANKS.

Prodidomus rufus was described by Hentz in Bost. Soc. Nat. Hist., in 1850. He formed the genus for this peculiar species. Nothing has been heard of it since. In 1864 Simon described the genus *Miltia* and in 1884 he discovered that it was synonymous with *Prodidomus*. Simon placed it in the family *Enyoidæ*. Thorell, however, in 1875, made a new family for it, placing the family between the *Enyoidæ* and *Uroeteidæ*. In 1884 Simon placed it as a group of the *Drassidæ*; two other genera have been described which are related to it, viz., *Timiris* and *Trochanteria*. Six other species of *Prodidomus* are known from North Africa, Western and Southern Asia. Two species of *Timiris* are described from Asia. One species of *Trochanteria* from West Indies. The characters of the group *Prodidominæ*

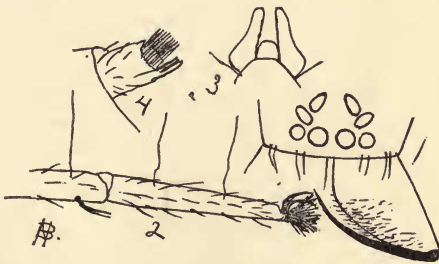


Fig. 12.—*Prodidomus rufus*: 1. front view of head and mandibles; 2. tarsus; 3. lip and maxillæ; 4. inferior spinneret.

have been given as follows: Lower spinnerets biarticulate, mandibles very long, maxillæ attenuated and converging, trochanter four longer than usual. Hentz gave as the characters of the genus the following: "Eyes eight, placed near together, four in front making a straight row, two on each side forming

a curve with the external ones of the first row and leaving a space above; external ones sub-oval, two middle ones round and black, maxillæ triangular, wide at base, pointed at tip; cheliceres very large, fangs long and bent; feet 4, 1, 2, 3." Of the species he said: "Rufous; abdomen deeper above, venter pale, four nipples; feet 4, 1, 2, 3. Alabama, in dark cellars." Although the sub-genus, as he called it, is placed between *Cylopodia* [*Hyptiotes*] and *Epeira*, he states under the head of "Observations" that this new sub-genus shows some of the characters of *Clubiona* and of *Theridion*."

Last summer I obtained some immature specimens of this spider. I first noticed one walking slowly over a shelf in a dark corner of the room. Specimens were afterward found between sheets of paper in a drawer, the latter had somewhat of a tubular web or mesh of threads. On examining the specimens one sees various peculiar structures, most, however, of but little importance. The color of none of my specimens is as red as Hentz describes; the abdomen is yellowish with some faint scattered silvery patches.

The cephalothorax and mandibles are yellow, the A. M. E. are black, and the fang of the mandible is red. The abdomen is covered with short hairs. The legs are whitish. There are five peculiar points to notice: 1st—The eyes; these are eight, four in a nearly straight line in front, the M. E. largest; behind the A. S. E., on each side, are two other eyes, the anterior one elliptical, the posterior one oval. The four front eyes are all round. On each side of the clypeal margin are four stiff bristles. 2d—The maxillæ; these are long and tapering, with the exterior border concave in the middle. 3d—The mandibles; these are very large, diverging, and furnished with a very long fang. 4th—The legs; these are furnished with four kinds of hairs; first, spines; second, bristles; third, short hairs; fourth, very long slender hairs; the latter I have never seen in any other spider. The claws are two and without teeth, but just under them is a very dense scopula. One will at once notice the length of the various joints of the legs. The trochanter is longer than usual, especially the hind pair. The patellæ are also longer than usual. The other joints are more nearly equal than in most spiders. The first pair of legs is somewhat stouter than the other pairs. The anterior pair of coxæ is much longer than the other pairs. 5th—The spinnerets; the the upper and lower pairs are large, the lower short, truncated, with long tubes. The lip is short, the sternum quite broad. As to its position, Simon has placed the group in the Drassidæ, and I think rightly; but there are many important features which ally it to the Dysderidæ, particularly the shape of the maxillæ, the size of the mandibles, the length of the anterior

coxæ, and the size of the anterior legs. Altogether I think that it represents a group in many points intermediate between the two families.

Dr. Fox thought that Mr. Banks placed too much stress on the importance of the long hairs occurring on the legs, and stated that they were by no means confined to this species, but occurred also in Thomisidæ and Lycosidæ.

Dr. Gill asked if the functional importance of these hairs is known, to which Dr. Marx replied that by German writers they are considered to be organs of hearing, or of service in that regard, and referred to analogous growths of structures which in the lower animals take the place in a measure of the more complex organs of the higher animals.

Dr. Gill and others discussed the organs of hearing and sound in different animals, arriving at the conclusion that in low animal life, as insect and arachnid, the sense of hearing is analogous to but has a much more restricted range than in the case of higher animals.

Mr. Howard stated that the appearance of well-developed sound organs in many insects argues that the organs of hearing are also well developed.

Mr. Chittenden presented the following paper for publication :

NOTES ON THE FOOD HABITS OF SOME SPECIES OF CHRYSOMELIDÆ.

BY FRANK H. CHITTENDEN.

The food habits of the adult beetles of the Chrysomelidæ are well known as compared with those of many other families of Coleoptera. This is due to various causes. Their attractive appearance, often bright colored and conspicuous, the fact of their being more than usually gregarious and numerous as a rule in individuals, and the further fact of their being diurnal, feeding externally and exposed on leaves and flowers, all contribute to this end. Then the omnivorous nature of so many species, that leads them in time of scarcity of their wild food plants to depredate on useful and familiar plants, has, more than anything else, conduced to an intimate knowledge of their food habits. Thus they are constantly intruding on the notice of the agriculturist, the official entomologist and the student of nature, and as a result a very large proportion of the best known species have at some time been reported as injurious to